

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Jack Giehl" <JACKG@s1.xetron.com>
Subject: 6JB6s & Drake C Line
Message-ID: <34342C4CE6@s1.xetron.com>

Dear BA Enthusiasts,

I just got a pair of new RCA 6JB6's for the T4XC. I got them from my buddy who put Penta tubes in his Drake C line (his Penta's are still working ok). The RCA tubes are new, have no date codes, and have "USA" stamped on them. Anyone know where they are made? Or who to call on the phone to find out?

I have three sets of final tubes. Set one is an pair of Sylvania's that are my main tubes, a spare set of Sylvania's, and now the RCA tubes. Below are the results of testing all three sets on 80 and 10 meters using a Bird 43 watt meter:

I get about 165 watts out on 80 meters, and about 135 on 10 meters with the Sylvania main tubes.

I get about 175 watts out on 80 meters, and about 145 on 10 meters with the Sylvania spare tubes.

I get about 160 watts out on 80 meters, and about 130 on 10 meters with the new RCA tubes. I did disturb the re-neutralization control when I tried the RCA tubes, so I can't comment on how well they neutralize, except that when I tested them, max out did not correspond with a plate current dip.

The RCA tubes seem ok, although not quite the same output as the Sylvania tubes. I don't know how well they will hold up under typical amateur usage. I've had the main Sylvania set in there since I got the T4XC two years ago. The power output has remained steady.

Jack

73,

=====
Jack, WB8BFS
jackg@xetron.com Loveland, Ohio (near Cincinnati)
=====

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: RE: 6JB6s & Drake C Line
Message-ID: <47480.owen@apollo.eeel.nist.gov>

In message Fri, 7 Jul 1995 09:21:54 -0500,
"Jack Giehl" <JACKG@s1.xetron.com> writes:

>
> I get about 165 watts out on 80 meters, and about 135 on 10 meters
> with the Sylvania main tubes.
>
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> with the Sylvania spare tubes.
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> with the new RCA tubes. I did disturb the re-neutralization control
> when I tried the RCA tubes, so I can't comment on how well they
> neutralize, except that when I tested them, max out did not
> correspond with a plate current dip.

I agree that the T4XC should be re-neutralized when new tubes are installed and probably at some regular interval also. The easiest way is to disconnect the B+ to the plate and screen, connect the output to a dummy load, connect a sensitive RF voltmeter to the output (the HP410B/C works fine) tune the driver, plate tuning and plate loading for max voltage and then adjust the neutralization capacitor for minimum output and you're done. The dip can be seen easier than the dip in plate current/max output with power applied. Do this on 10 meters of course. My question*** I've owned 2 T4XB's and the current T4XC and I've never seen greater than about 95 watts output on 10 meters on any of them. Have I gotten all "bad ones" or does Jack have a really good one? I get about 120 watts output on 80-20 about 100 watts on 15 and 85-90 on 10. What do some of you others get? Jack did you measure this with a dummy load (I'm sure you did) and a known accurate wattmeter? Of course I'm no longer sure my Heath HM102 wattmeter is still accurate, its been over 20 years since I calibrated it against a Bird 43 but was within about 10 watts then. I would like to know!!!

James C. Owen, III
National Institute of Standards & Technology (NIST)
Bldg 225/B360
Gaithersburg, MD 20899
1-301-975-5623

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Bob Scott" <bob_scott@cpqm.saic.com>
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <n1407033816.58955@cpqm.saic.com>

Is there a problem with RCAs?

73, Bob AC4QO Bob_Scott@cpqm.saic.com

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: mallick@orion.crd.ge.com (John Mallick)
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <9507071310.AA03945@orion.crd.ge.com>

I've heard that the only reason to use Sylvania's over other brands is that you won't need to re-neutralize the final (Drake, I assume) if you replace with the OEM brand.

73, John WA1HNL

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Barry L. Ornitz" <ornitz@EMNGW1.emn.com>
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <Pine.ULT.3.91.950707100700.26537B-1000000@dua150.kpt.emn.com>

On Fri, 7 Jul 1995, John Mallick WA1HNL wrote:

> I've heard that the only reason to use Sylvania's over other brands is
> that you won't need to re-neutralize the final (Drake, I assume) if
> you replace with the OEM brand.

You are asking for trouble if you don't neutralize the final. If you only used tubes from the same manufacturing lot, you MIGHT get away with not doing this. Lot to lot variability from even one manufacturer is certainly good reason to check the neutralization. Besides, it is so easy to neutralize the Drake finals. I have used RCA, GE, and Sylvania 6JB6's in my T-4x since it was new in 1966 with absolutely no problems. I have often found that the bias and neutralization required major adjustment when switching from one brand to another, but all brands seemed to work fine after the correct adjustments were made.

I really think R. L. Drake and others helped to start the "appliance operator" trend in ham radio when they suggested going back to the manufacturer to buy matched tubes that (sometimes) did not require resetting the neutralizing capacitor.

73, Barry WA4VZQ ornitz@emn.com

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: mallick@orion.crd.ge.com (John Mallick)
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <9507071505.AA04441@orion.crd.ge.com>

Right you are, Barry. I always re-neutralized my finals after replacement, and have had no problems; I was just repeating the folklore that I saw here on the list a while back.

The neutralization adjustment is pretty easy, provided you haven't had too much coffee; otherwise, you can rattle the screwdriver in that little hole provided to get to the neutralization cap and have some fireworks on your hands. You really do want to keep one hand in your pocket while fiddling with it, as well as using a *well* insulated screwdriver.

73, John WA1HNL

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: rdkeys@unity.ncsu.edu
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <199507071548.LAA16756@cc01du.unity.ncsu.edu>

> You are asking for trouble if you don't neutralize the final.

Amen! Every time one changes final tube(s) one should do a proper neutralization. Failure to do so is an invitation to squirrly city with the tennessee vally injuns, not to mention melting yer plates (not to often done, but I have seen 6146's and many sweep tubes with the classic burn spots on the plates and the sucker glass warble syndrome). In things like sweep tube amps or finals, that is a dead giveaway of improper neutralization or heavyhanded CBishness in the operating category. Last gasp tube rigs are notorious for running the finals at the limit and beyond spec.

> If you
> only used tubes from the same manufacturing lot, you MIGHT get away with
> not doing this. Lot to lot variability from even one manufacturer is
> certainly good reason to check the neutralization. Besides, it is so
> easy to neutralize the Drake finals.

For best results, always check neutralization, if possible.
Since many of my tubes come from unknown sources, it is best to check.
It becomes SOP.

It is easy to neutralize any final, although some rigs require that you stand on your head to do it. The easiest rig in the world to run a neutralization on is the classic BC-191 --- merely pull the final tube, tape one filament pin, reinstall the final tube, tune for max output on a field strength meter, adjust neutralizing cap for a dip, and away you go (don't fergets ta removes da tape once ya's done). It takes all of about 1 minute, even in the heat of battle or BA'ing.

The brother BC-375 was a bit more onerous, since you had to pull the back panel (a bazillion screws) and unsolder the plate lead to accomplish the same thing. The basic principles apply to all rigs. I would think that one could install a filament switch on the final and kill it for a quick reneutralization anytime a rig was opened up for retubing. Manufacturers were not thinking that far ahead.

- > I have used RCA, GE, and Sylvania
- > 6JB6's in my T-4x since it was new in 1966 with absolutely no problems.
- > I have often found that the bias and neutralization required major
- > adjustment when switching from one brand to another, but all brands
- > seemed to work fine after the correct adjustments were made.

I would concur, even on BA rigs of the ancient variety. Differences in manufacturing/manufacturers caused significant grid/plate capacitance differences in the tubes. Because you don't really know what you have in hand, the best bet is neutralize.

I love 813's because they require often no neutralization when idling along at 50%, as in the Radiomarine shipboard transmitters idling along at 1200 volts plate, and 350 mils to a pair o' the beasties. I have had the original pair running in mine for 20 years in daily operation with nil problems --- God Bless 813's.

Even full bore, usually a gimick wire or metal strip capacitor run near the tube envelope is all that is required in the way of a neutralizing capacitance on 813's. Real 6146's get along about the same (I wonder if RCA designed the beast that way on purpose, as a miniature replica of the their rugged 813, tailored to ham use?). Someone posted the story of the 6146 on the list. I will have to check. Sweep tubes, the poor little overrun orphans of the TV industry, are almost always pushed to their limit or beyond, and always need careful neutralizing to keep the ether smoke under vacuum internal in the tube where it belongs and keeps its mystic veil up.....(:+{}....

- > I really think R. L. Drake and others helped to start the "appliance
- > operator" trend in ham radio when they suggested going back to the
- > manufacturer to buy matched tubes that (sometimes) did not require
- > resetting the neutralizing capacitor.

It is cheap insurance for the manufacturers to specify such shennanigans, especially when finals are pushed to the limit. It supercedes technical knowhow --- what a revolting development Riley!

It is a shame that so much basic technical operational skill is forgotten. Appliances belong in the kitchen, not the shack, in my opinion. Unfortunately, it seems too few hams are sufficiently

technically oriented, even with the instructions in hand to do a simple thing like a neutralization. It shouldn't be that way.

Surely all boatanchorites should do pennance and re-neutralize their finals. We have to keep the fires burning and remember the art and craft (or at least where to find it in the 1936 handbook). That goes hand in hand with boatanchoring.

Maybe we should add it back to the exams as a basic question. Hopefully the appliance operators will not have forgotten the basics of the art. (Probably that is asking too much.....(:+{{.....). Boatanchorites are different, right!

> 73, Barry WA4VZQ ornitz@emn.com

73/Bob/NA4G

Geesh, did my tirade begin already, and it is only Friday am?
More pennance on the test bench will be required in the wee hours.....!
NO flak directed to anyone is intended, just food for thought.

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: mallick@orion.crd.ge.com (John Mallick)
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <9507071607.AA04842@orion.crd.ge.com>

Just curious, Bob...my Johnson Ranger uses a 6146 in the output, but has no provisions for neutralization. The Johnson Valiant uses 3 paralleled 6146's and does have adjustable neutralization. Any idea why the designs evolved that way?

John WA1HNL

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "Hal R. Waite" <halwaite@netcom.com>
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <Pine.SUN.3.91.950707103029.17469B-100000@netcom21>

> I really think R. L. Drake and others helped to start the "appliance
> operator" trend in ham radio when they suggested going back to the
> manufacturer to buy matched tubes that (sometimes) did not require
> resetting the neutralizing capacitor.

>

> 73, Barry WA4VZQ ornitz@emn.com

It is my understanding that the matched tubes are only for the purpose of equalizing the power handling (plate current) through each tube.

Hal K4GFI/7 halwaite@netcom.com

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: rdkeys@unity.ncsu.edu
Subject: Re: 6JB6s (I spoke too soon)
Message-ID: <199507071737.NAA22175@cc01du.unity.ncsu.edu>

>
> The neutralization adjustment is pretty easy, provided you haven't had
> too much coffee; otherwise, you can rattle the screwdriver in that
> little hole provided to get to the neutralization cap and have some
> fireworks on your hands. You really do want to keep one hand in your
> pocket while fiddling with it, as well as using a *well* insulated
> screwdriver.
>
> 73, John WA1HNL
>

Ouch! I did just that one time, and one time only, whilst playing with a rig. It made my OM's saying ``keep one hand in yer pocket when playing with high voltages'' (his old Signal Corps training showing then), take on firm meaning.

Now I always use my OM's favorite insulated shaft alignment tool (you know them things is getting scarce to find these days that are not just cheap plastic rods). I have made a few from wooden dowel rods, etc., but they never were as strong as that ancient machined bakelite shaft one my OM used in his tool kit for years and years and years. Unfortunately, they have not apparently made those since the early 1950's or so when the things started being made of cheap plastic. The real ones are rugged enough to last a lifetime if you don't lose them.

If anyone knows of a source of the old style machined bakelite shaft alignment tools, I would love to find out about it.

73/Bob/NA4G

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "Barry L. Ornitz" <ornitz@EMNGW1.emn.com>

Subject: Re: 6JB6s (I spoke too soon)

Message-ID: <Pine.ULT.3.91.950707134050.27639B-100000@dua150.kpt.emn.com>

On Fri, 7 Jul 1995, Hal R. Waite (K4GFI/7) wrote:

> > I really think R. L. Drake and others helped to start the "appli-
> > cance" trend in ham radio when they suggested going back to the
> > manufacturer to buy matched tubes that (sometimes) did not require
> > resetting the neutralizing capacitor.
>
> It is my understanding that the matched tubes are only for the purpose of
> equalizing the power handling (plate current) through each tube.

Yes, but my comment was really directed to the fact that Drake did not want the average ham to match the tubes himself (which is easy if you have a transconductance tester and a number of tubes). By insisting on pre-matched tubes and suggesting that hams come back to Drake for replacements, Drake was assured of future business. But then considering how technically illiterate the average ham had become (even in the mid-1960's), Drake may have wanted to keep their good reputation by not having a large number of "dirty" rigs on the air. Of course, once started a myth developed so today you still hear things at hamfests like "Only Sylvania tubes will work."

For those wanting further info, read the boatanchor archives for late February and early March of this year.

73, Barry WA4VZQ ornitz@emn.com

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995

From: swheaton@tyrell.net (Sheldon Wheaton)

Subject: Acoustically Tuned Headphones

Message-ID: <199507071250.AA14385@www.tyrell.net>

For an interesting article on acoustically tuned headphones, refer to the August, 1928 issue of QST, page 23. The 7 page article includes more theory and supporting mathematics than a years worth of QST in the 1990's. Practical construction details are also included. It was written by a research engineer at the Maxim Silencer Company. The project is also the subject of a very interesting cover photo on the front of the magazine.

Sheldon KC0CW

swheaton@tyrell.net

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995

From: ad184@rgfn.epcc.Edu (Dale N Richardson)
Subject: Atwater Kent Radio
Message-ID: <9507070110.AA05354@rgfn.epcc.Edu>

Hello all. I have just come across a Atwater Kent Model No. 40 in very good shape. I don't know much about the radio other than it works pretty good. The speaker is abt 18 inches in diameter and on a pedestal base and is about 6 inches deep. The speaker is in super condition, no tears, rips, or holes and is extremely clean. The receiver looks like it could hold a fruit cake or a lot of bread and is chocolate brown. The interior is immaculate with a paper strip labeling all seven tubes and different binding posts. There is a brass id tag on the chassis with the model number and patents. The tag also states licensed only for radio amateur experimental use and broadcast reception. This really isn't in my line of collecting and is the first one I have ever seen. I have no idea what to ask for it and I need to get rid of it. If anyone is interested or has any idea about this model please contact me at (915) 821-3472 anytime or by email at ad184@rgfn.epcc.edu. Thanks and 73...Dale AA5XE

--

Dale N. Richardson

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: thaake@bsm2ee1.attmail.com (thaake)
Subject: B&W Help
Message-ID: <PMX-TERM-2.02-bsm2ee1-thaake-323>

Gang,

Can anyone dig into there manuals and or data books to look up the useful specs on the B&W CX series of transmitter caps. The CX is the large butterfly job that takes the HDVL 1KW plug-in coils. There also appears to be a smaller version that perhaps takes the 500 Watt coil sets.

The only ARRL handbooks I have refer to a CX-62. When using the HDVL coil on 3.5Mc an additional 100PF vacuum fixed cap is required accross the CX-62. The picture appears to show the CX-62 as having 4 sets of plates.

I have what I think is a CX-49(a) which looks same in construction but has an extra set of plates versus what appears in the handbook.

What versions of this large tank capacitor were made and what were their designed operating bands? The HDVL series has a 160M band coil but would seem to me to be impossible for the CX cap to resonate at that freq. without some extra help. When I check it with my capacitance meter and plug in the HDVL specs on the lightning calculator I can't see it working.

Any ideas on using the CX-49?? I would like to use it on 40/80/160.

Tim WA0TSY
thaake@bsm2ee1.attmail.com

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: rdkeys@unity.ncsu.edu
Subject: BA CWIST FUNzies Again Tonight
Message-ID: <199507071809.0AA24565@cc01du.unity.ncsu.edu>

Wat der heck, Boatanchorites.....

Let us stoke up the firebottles tonight for another round of the CWIST friendly friday night fist function as follows:

0100Z	7027khz	Bug speed run
0200Z	3527khz	Bug speed run
0300Z	7027khz	Leisure speed run
0400Z	3527khz	Leisure speed run

Calling procedure: CWIST IMI yourcall K

>From the top of the hour to maybe 5 minutes after the hour.

I will have the HW-16 on 40 meters and the RAL + ET-8019A on 80 meters.

ZUT OM

73 CU SU VA DE NA4G/Bob

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995

From: thaake@bsm2ee1.attmail.com (thaake)
Subject: BA Sighting
Message-ID: <PMX-TERM-2.02-bsm2ee1-thaake-324>

Noticed last night when watching the "Know Zone" (a science and technology hourly program) on the Discovery cable channel a BA. Well sorta.

When the host (name?) walks into his set with camera following there is a table with lots of stuff on it of which is included a Hallicrafters S-53. What caught me off guard the first time the camera panned the table was that the Halli has the cabinet removed and the chassis appeared to have sprouted many more tubes!! Another view later in the program exposes an additional BA pushed against the back of the defrocked S-53. Not sure if it was an glass audio amp or what?

Tim WA0TSY thaake@bsm2ee1.attmail.com

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Book reprints
Message-ID: <9507061741.AA05430@bock.ih.att.com>

I would love to get a reprint of that Superhet mag/book.
I collect old BC superhets, and believe me there are no two alike!
Other than having two knobs and at least 3 IFs, that is. --mike k

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Alan Richer/CAM/Lotus <Alan_Richer/CAM/Lotus.LOTUS@crd.lotus.com>
Subject: Re: Broadcasting in the Blackout
Message-ID: <9507070058.AA27565@internet1.lotus.com>

Re: When:

1965, guys.... Octoper, as a matter of fact, though the exact day escapes me.

ajr

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: durham@w2xo.pgh.pa.us (James C. Durham)
Subject: Re: Broadcasting in the Blackout
Message-ID: <199507070153.VAA05890@w2xo.pgh.pa.us>

Dick Dillman/WPE2VT wrote:

>In 1964 I was driving home from Nassau Community College on Long
>Island and, as usual, listening to Big Dan Ingram (one of the best
> DJs ever IMHO) on WABC.

>But things started to get weird. Dan was sayin' stuff like
>"Something's wrong here. All the cart machines are slowing down! I

(rest of story of big NorthEast power blackout deleted)

I'm gonna get a "bandwidth penalty", but this is just **too** good
a brand of stuff not to comment upon....

We had the baby brother of this when I was working in Cleveland about 1962. I was working 2 jobs (6am-2pm at WEOL in Elyria, Ohio, near Cleveland, and 3-midnight at WGAR in Cleveland) trying to make money to go back to school. I was at the WEOL transmitter when the lights went out at about 630 am. They came back on, but no audio from the studio. I called on the phone, and found out that the lights were off there also, about 15 miles away. The studio guys didn't know the transmitter was on, so they grabbed a battery remote amplifier and hooked it up to the program line and **voila**...we had microphone audio on the air. There was no way to play any music, there were no TTYs working, no network, no news and what could you talk about for hours and hours? Gotta play some music....welllll...the only thing we had were two ancient Magnicord PT-6's and some old fill music tapes with some announcer on them that sounded 80 years old and they **didn't** want his announcing on the air, so I had to listen to each cut on the tape, figure out what it was, cue past the old announcer, and then tell the DJ downtown what the next song was, then he'd introduce it, and I'd **patch** the PT-6 into the transmitter and start it. Then reverse the process at the end of the song. The rub was..there was at least 30 db difference in the level from the PT-6 and the line from downtown. So, I had to rush about 20 feet over to the limiter amplifier in the rack, turn down the gain 30db, rush back, make the patch, start the tape, listen to the other PT-6 to figure out the next song, cue it up, then, when the song ended on the air, patch in the studio, rush over to the rack, turn up the gain... and repeat the process over and over. I was a **wet noodle** by the time my relief came in at 2pm, but we were just about the **only** thing on the air in the whole Cleveland market. I somehow managed to get the tuner going and listened to the AM band. WGAR (my other job) was on the air for a few minutes after the lights went out, then they were **gone!* 50 kw in Cleveland and no speak..no play music..no nuttin! I kept trying to listen, between rushing around back and forth to the rack, but they didn't come back... I knew we had

a generator both at the xmtr site and the studio, so I wondered what was going on..

One funny aside...our Chief Engineer had AC in the remote truck, but it was a huge generator and bolted in the truck. He decided to run AC from the truck up through the window on the 3rd floor of the Elyria Savings and Trust building to the studio control room. He couldn't find any wire and everything was closed! SO, he finally found a TV store that was sorta open and bought a couple hundred feet of 300 ohm..you guessed it..TWIN LEAD..! It lasted about 5 minutes! Reports are that there was this brown goo all over the sidewalk! I'm *not* making this up!

Anyhow, I got out of WEOL and made my daily dash to WGAR, wondering what on earth was wrong. I got there to find every engineer on the staff climbing over, tearing apart and generally molesting the 5KW standby transmitter. Seems the generator was too small for the 50KW, so they had put on the 5KW, and about 30 minutes later...kapoot!!

Strange thing was that none of the old guys ever fooled with the 5KW normally. The chief thought it was a great learning tool for us "kids", so he had another guy, Al, and I doing the maintainance and general tweeking of the 5KW. Welll...when it went off, neither AL or I were there. Al arrived before I did, but the old guys wouldn't let him *near* the 5KW... The station was owned by People's Broadcasting in those days, a subsidiary or Nationwide Insurance. The chairman of Nationwide was Mr. Carl George. Guess who was planted in the operator's chair and smoking a zillion cigars? Right... Anyhow, AL says to me... "It's the stupid filament reostat..but they won't let me near it!". "Oh YEahh..I muttered..." About then, AL just said "screw it"..and went over to the front of the 5KW and grabbed the reostat knob...JIGGLE JIGGLE...ka-chunk....music..radio..RF..stuff! Boy were the OF's embarrassed! Mr. George threw down his cigar, looked at AL, glared at all of the OF's..and departed!

End of Story...knee-slapping allowed..

-Jim D.

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Henry van Cleef <vancleef@bga.com>
Subject: Re: Broadcasting in the Blackout
Message-ID: <199507070644.BAA12847@zoom.bga.com>

Yes, I recall the Northeast blackout, but it was in Nov. '65---we were still in the process of moving from Oregon to Mass. at the time, and I was working for a little op amp manufacturer name Nexus. I had lashed up a bizarre circuit for distributing dissipation in a high-current totem pole output circuit, and was bringing it up slowly while watching various points on a 4-trace scope, when the lights in the room went out, making the scope very easy to see---then the scope traces vanished. I recall a couple of flickers, and hearing a large motor nearby slow down, then drop out as the current vanished. After a few minutes, it was obvious power wasn't coming back, so I got in my car and headed for home. There was a classical music daytime station then that signed off at dark, and a CBC station in Toronto on the same frequency that I could get at night. It was on the air, and talking about power having gone out in Buffalo and Syracuse, and I thought that was an interesting coincidence. It was not for about fifteen or twenty minutes, as I drove through miles of unlighted area, that I realized that the local situation was massive, and that it occurred to me that what was being reported from Toronto (which was increasing its list of places without power southeastward) that I began to suspect that what was happening in upstate New York was connected with our power outage.

I don't recall a lot of the details now. My wife, who worked in a place where she traveled by trolley car (the old MTA) had gone home by trolley, which was still running---the MTA generated their own power. I think I'd gotten home and the news reporters I was listening to still hadn't figured out that there was a massive outage. I think the only battery radios we had were the ones in the cars, and that we tried to dial up other stations for local information, but all we got was DX, like WOWO and KMOX, who seemed blissfully unaware that anything was happening east of them. And I recall her hypothesizing that this must have involved sabotage---neither of us were prepared to believe what turned out to be the truth, that one fault had propagated through the whole system.

I went to work for Raytheon a few months later, and recall that a request to add provisions for power-out operation and transfer to locally-generated power were added in the bid requests for the Air Traffic Control display system which we were then bidding on.

Looking back on it, the controls on power generation and distribution systems were incredibly rudimentary then---overcurrent and overvoltage relays, with some fairly simple feedback controls to the generating equipment and everything else relay-controlled, taking on the order of 100 milliseconds to operate. I heard several good war stories from people on generator sites---you don't just unload a large turbine-powered generator by punching the breaker open. Also, there was no method for bringing up the grid from "cold"---each section

brought up meant bringing it up against starting loads of things like refrigerators, with high current and terrible power factors, and nothing that could be brought on line was big enough to get sections up so that they could be linked very easily. My recollection is that there were a few isolated power plants that stayed up that were used to provide support for adjacent areas.

So far as the impact on air traffic control went, we can still be glad that it was a bright clear moonlit night over the Northeast. The entire IFR system vanished---navaids, approach facilities, tower communications, etc.---and pilots (often not carrying enough fuel to fly out of the blackout area) of airliners essentially "went VFR" and sorted things out for sequencing in the air. The consequences, had any of the region had hard IFR weather (and its rare that it doesn't) are a bit horrible to imagine. While the provision for power-out transfer was an "afterthought" added as a result of the blackout, it was something that had been needed for some time (as were more sophisticated controls for load shedding in the grid)----though I suspect that the current situation is one of mid-seventies technology being the "latest and greatest" in that area, today.

--

Hank van Cleef vancleef@bga.com vancleef@tmn.com

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Michael.J.Knudsen@att.com
Subject: RE: CIA Radio Info Wanted
Message-ID: <9507061634.AA05311@bock.ih.att.com>

Fascinating to think that W-J may have been around since WWII.
I just recently heard of them (which is probably no accident :-).
Nice to think they built some REAL electronics systems. 73, mike k

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Tony Stalls (K4KY0)" <j38@clark.net>
Subject: RE: CIA Radio Info Wanted
Message-ID: <Pine.SOL.3.91.950707083630.16383A-100000@clark.net>

On Fri, 7 Jul 1995 Michael.J.Knudsen@att.com wrote:

> Fascinating to think that W-J may have been around since WWII.
> I just recently heard of them (which is probably no accident :-).

> Nice to think they built some REAL electronics systems. 73, mike k

I'm a retired US Secret Service agent and back in the 1970's whenever we traveled overseas with the VP or Kissinger and the White House Communications Agency (WHCA) didn't provide communications, the CIA did. What I always saw used by both agencies were good old reliable KWM-2A's and either Collins tape dipoles or what I recall as being TMC autotuners with a relatively short vertical without radials.

I knew most of the WHCA guys, some of whom were hams, but the company guys came from somewhere near our destinations and were always amazed that a lowly Secret Service agent (a good many of them considered themselves "hot stuff" in the image of 007) knew how to tune the KWM-2A's up and when I quoted back what they were sending on CW, they were REALLY impressed, or I should say semi-stunned. I'm certain that the CIA still uses CW and a mastery of the code for them will remain a requirement for some time to come.

Today, WHCA has their own encrypted satellite links and of course they're not as much fun to use. Typically on a presidential trip anywhere in the world, you'll see phones with the WHCA White House logo all over the place that behave exactly the same as phones in the WH complex. When you pick them up and dial 9, you get a metro Washington dial tone.

73,
Tony
K4KY0

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Johnson_Dan@AAC.COM
Subject: Re: Cleaning out the attic
Message-ID: <9507070505.22615.aa@SMROUTER.AAC.COM>

Content-Type: text/plain; charset=US-ASCII

Laura,

> I can just imagine people listening to the Empire (now World)
> Service on these radios - dadadaDUM, "Some chicken...some
> neck!"...Dunkerque and Normandy...El Alamein (where a couple of my
> uncles had tanks blown out from under them)...Singapore...and, of
> course, more mundane things, like Hockey Night in Canada, and the
> Plouf Family. Spooky...

Now that's a detail which had escaped me. So, it was called the Empire Service. I wonder how difficult it was on the British to lose the

perception that they dominated the world and whether that happened over a long period of time, more than a generation, or was sudden. Obviously, your correspondent's history department is a tad underdeveloped. I wish someone would take up where Tom Lewis left off in the book, "The Empire of the Air".

I don't understand your reference to "the Plouf family". Alas and for the most part, replays of classic radio here concentrate on American entertainment radio. Clearly, that is not all there was. On anniversaries of historic significance, however, one can catch old news broadcasts, occasionally including BBC reports. Has anyone recorded Cold War propaganda broadcasts from HF of the 60's and 70's for its historical value? I recall some of the later material, but the genre has disappeared for the most part.

(Aside: in the Washington D.C. area, WAMU plays classic radio shows every weekend. Unfortunately, WAMU is an *FM* station, so I can't receive it on the venerable broadcast receivers which seem to be invading our living spaces. Guess I'll need to revive the old Philco AM/FM table radio - at least its FM tunes the "modern" broadcast allocation :-)

Thank you for sharing your Dad's old radios with us. Though we couldn't see them, we could feel them. When I am gone, I hope that my daughter values my legacy as much as you obviously do his.

-d
Johnson_Dan@aac.com

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Bill VanAlstyne <bill@cruz.com>
Subject: Re: Cleaning out the attic
Message-ID: <199507070534.AA09087@cruz.com>

At 08:55 PM 7/6/95 -0500, Johnson_Dan@AAC.COM wrote:

>... Has anyone recorded Cold War propaganda
>broadcasts from HF of the 60's and 70's for its historical value? I recall
>some of the later material, but the genre has disappeared for the most part.

I did... In 1961/62, when I was in 9th grade, I used to record on tape and then transcribe by typewriter the Radio Moscow news broadcasts for my Geography class. Have no idea what ever happened to those old reel-to-reel tapes... Wish I did know, now!

Bill VanAlstyne
N6FN
bill@cruz.com

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: rdkeys@unity.ncsu.edu
Subject: Re: Cleaning out the attic
Message-ID: <199507071434.KAA11784@cc01du.unity.ncsu.edu>

> >... Has anyone recorded Cold War propaganda
> >broadcasts from HF of the 60's and 70's for its historical value? I recall
> >some of the later material, but the genre has disappeared for the most part.
>
> I did... In 1961/62, when I was in 9th grade, I used to record on tape and
> then transcribe by typewriter the Radio Moscow news broadcasts for my
> Geography class. Have no idea what ever happened to those old reel-to-reel
> tapes... Wish I did know, now!
>
> Bill VanAlstyne
> N6FN
> bill@cruz.com

Along a similar thought, back in 1978 or so (maybe earlier, I am not sure, exactly) I recorded one of the last commercial CW PRESS runs from WCC (RCA Globecom --- remember them days Myrtle?). It has things like the baseball scores, the stock quotes, the temperatures around the world, plus news briefs, that are just not found anywhere on the air, anymore. Sounds like I will have to do some digging this weekend and see if said tapes still exist..... might be fun to resurrect.

73/Bob/NA4G

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: tech@cs.athabascau.ca (Richard Loken)
Subject: Cleaning out the attic
Message-ID: <m0sUGu6-0018KTC@aupair.cs.athabascau.ca>

Dan Johnson says:

>Now that's a detail which had escaped me. So, it was called the Empire
>Service. I wonder how difficult it was on the British to lose the
>perception that they dominated the world and whether that happened over a
>long period of time, more than a generation, or was sudden. Obviously, your

How are the Americans taking to this discovery in 1995? The life cycle of an empire is getting awfully short.

I think the decline from tremendous cosmic power to iddy biddy living space has left visible scars in the British mentality. The USA worries me though because they are declining at a good pace and still armed to the teeth, put the wrong people in office and life could get real uncomfortable for the rest of the world. (Just look at popular conservative rheotoric on the UN and Japan etc.)

The Plouf Family were a very Canadian radio drama which ran for years way back before I was old enough to turn on a radio. Laura you missed Lorne Green, "The Voice of Doom", reading the war news. Dan, ya gotta know who Lorne (Bonanza and Battle Star Galactica and all that) Green was.

"Its the Happy Gang!"

"Well come on in!"

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
Athabasca University : tuques we wear, our heads
Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Arthur Black

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: paul Veltman <veltman@netcom.com>
Subject: Collins Part Wanted
Message-ID: <Pine.3.89.9507062135.A28621-0100000@netcom19>

Gang,
I need a Collins S-Line Spinner knob for my KWM-2A. Does anyone have an extra, or can you point me in a direction other than Surplus Sales of Nebraska. I am also on the lookout for S-Line that has been canabalized.

Thanks,

Paul WA6OKQ

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Bill Strangfeld <bstrang@iac.net>
Subject: dm-42-a wanted
Message-ID: <Pine.SUN.3.91.950707091625.4789C-100000@little-miami.iac.net>

Hello gang.

The BC-652 receiver that has been pining away in the basement with loneliness finally got a companion: the BC-653 transmitter showed up in the UPS truck last week. All 140 pounds of it. (Yes, UPS now delivers up to 150 pounds but the driver who drew the short straw wasn't soliciting repeat business and I had to help him unload it.)

The BC-652 and BC-653 are the main parts of the SCR-506-A, a WWII vehicle set that covers 2 to 4.5 MHz with a pair of 814s in parallel. (Hope I don't have to replace them!) Four preset channels, and one tunable. The May, 1945 QST has a picture on the cover and a story about how it was designed as a CW only set (100 watts output) but grid-modulation was added as an afterthought at the request of the Air Corps, with an output of 25 watts or so on phone.

So now I am looking for the DM-42-A 12 volt dynamotor for the transmitter. Has a typical round case, with an unusual square panel on one end. Would also like the DM-43-A which is the 24 volt transmitter dynamotor, or the DM-41-A, which is the 24 volt dm for the receiver.

While I'm dreaming, does anyone have the FT-253-A rack mounting base for the SCR-506? Or stories about this set?

Thanks!

73, Bill Strangfeld, wb8yuw, bstrang@iac.net

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: wendler@tomcat.adc.ray.com (John Wendler)
Subject: Re: Drake Neutralization, tobacco grime
Message-ID: <9507071837.AA25132@tomcat.adc.ray.com>

.. a well insulated screwdriver...

Having pulled a few sparks myself, I would probably slip some heatshrink tubing over the screwdriver shaft next time.

I recently decided to try out some BA-list advice in restoring a smoker's MN-4C. The Dow Cleaner (scrubbing bubbles) worked like a hose! (How does a hose work? Well, did you ever have trouble with one? If you didn't run over it with a lawnmower?)

I tried it on the knobs first, and saw yellow stains rise to the surface immediately. This inspired me to try it on the front panel and the case, which worked wonderfully. You can no longer tell which section of the panel was beneath the meter, and which was not. I used finger scrubbing on the panel, only, and rinsed off within 15 - 30 seconds to prevent damage to the paint. Knobs and case got the toothbrush. The meter got cleaned with glass cleaner.

I have not yet tried this on a smoked up dial, but will let the group know how it works out. (I will try on a small section first)

In other news, I have been building a Curtis 8044ABM based keyer. In cruising for parts, I have come across Electronics Plus in Littleton, MA. They seem to have a nice selection of chassis, some Jim-Pak, and some current and obsolete Radio Shack stock. I picked up a 50 uA meter there. Some prices were OK, some not, but it is nice to have another option in the area!

Thanks for the advice, gang!

John

John P. Wendler, P.E. e-mail: wendler@tomcat.adc.ray.com
Raytheon Advanced Device Center phone: 508-470-9433
358 Lowell St. fax: 508-470-9345
Andover, MA 01810 Callsign: N5CQU

DISCLAIMER: Any opinions expressed in the foregoing message are solely
the author's and do not represent the position of the
Raytheon Company.

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "Deane D McIntyre" <dmcintyr@acs.ualgary.ca>
Subject: Echophone EC-1 - LO problems, BC348 -IF problems
Message-ID: <9507071641.AA43185@acs6.acs.ualgary.ca>

The other day, I fired up the Echophone EC-1 (similiar to the S-38) and discovered that the rig did not receive on the highest band (8-30 Mc; unlike the S-38, the EC-1 is a three band receiver, 550-2000 kc, 2 Mc-8 Mc, and 8-30 Mc). The 12SA7 was not oscillating on the 8-30 Mc band; the other bands are fine. Aware that the 12SA7 is not a great tube on the higher HF frequencies, I replaced it which restored operation to the UPPER part (11-30 Mc) of the band, but around 10 Mc and lower the 12SA7 would oscillate for a while, than stop for a few minutes before restarting. At 9Mc it is dead. A third 12SA7 had the same problem. What should I look for? Two of the 12SA7's were RCA, the other GE. This one sure has me scratching my head.

My BC-348 works fine, except for one problem. We are blessed with a 50 kW BC station on 910 kc a few miles east of town. This is close enough to the BC-348 IF frequency that the 910 kc signal gets into the IF and beats with the IF signal. Any ideas? Filter in the antenna lead to reject 910? Does the BC-348 have a trap to trap out signals around the IF frequency at all?

All suggestions welcome....

73, Deane D McIntyre VE6BP0

P.S. the Great Blackout of 1965 affected parts of eastern Canada as well.
We had no power for several hours at our QTH, 40 miles east of Toronto...

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Sifakis George <sifakis@isoft.intranet.gr>
Subject: RE: Email directory
Message-ID: <2FFD8867@msgw.isoft.intranet.gr>

Bill writes:

| Sounds like it might be a good idea to have an email directory for this
| group. Then, if I had to live with a sysadmin who didn't know what the
| Internet mail headers were there for (or which ones were important), then
| I could go look up an individual reply address.

| Does it already exist, Jack?

| Bill Hawkins bill@bvc.frco.com

If you have Microsoft mail, you can retain the whole Internet header by
inserting the line
StripGatewayHeaders=0
in the "msmail.ini" file in the Windows directory. Of course, you may get
more than you bargained for in terms of volume.

George SV0KA sifakis@isoft.intranet.gr

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Frank C. Gilmore Jr." <fgilmore@gxl.woodtech.com>
Subject: Re: FS: Old Microphone
Message-ID: <Pine.LNX.3.91.950707014601.27795A-100000@gxl.woodtech.com>

On Wed, 5 Jul 1995, Steve Ellington wrote:

> Desk mike. Heavy cast metal On the fron it says Recordio and has a
> round WG emblem on the metal grill.On the back is the following
>

> Controlled Reluctance
> Microphone Model CR80G
> Manufactured by
> SHURE BROTHERS
> Chicago, U.S.A.
>
> It has a cotton covered lead with a standard phone plug and the whole thing
> is in very good condition. Dimentions are about 3"h x 3"w x 1" thick and
> it has a flanged base. It is pewter in color and the emblem is gold.
>
> Is anyone interested?
>
> Steve
> n41q@iglou.com
>
>
>
>
>
>

Steve what you have is the companion microphone to the Wilcox-Gay Recordio home tape recorder. It was on the market for many years in various models, I have a couple of them in my BA Audio collection. They were a bit pricey for home use but schools bought them by the carload.

Can't tell you the frequency response, never had occasion to measure it, but it wasn't too bad. It was a W-G and an even older Ampro that got me started in the recording studio business...it started as a hobby but expanded to a passion!

73,

Frank
de K0JPJ ex-W5PVX ...--

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: swheaton@tyrell.net (Sheldon Wheaton)
Subject: Re: Glyptal Cement
Message-ID: <199507071250.AA14353@www.tyrell.net>

In my discussions with both General Electric & Glyptal, Inc. about a year ago, as part of my "real world" job, I was informed that Glyptal was originally a GE product, and the division was allowed to separate from GE, and start a new company, called Glyptal, Inc. (1). The company makes hundreds of "paint" products, and the old standby "Glyptal", is officially called "#1201 Red Enamel". Elsewhere in their literature, it is referred to as an alkyd paint. It was originally developed as an insulating paint for coils & armatures, but the company now markets the product as a

"do-anything" substance, claiming applications as a primer, sealer, adhesive, and more. Dielectric strength is specified to be 1500 volts per mil. It is sold in quarts and larger sizes. 1201A is a spray can version, and 1201B is a thicker version for thread sealing, etc. The product has been made "for over 30 years". It meets mil-spec MIL-E-22118.

The GC Electronics (2) (formerly General Cement Mfg. Co.) product is called "Red Glyptal Insulating Varnish", and is also claimed to be a Alkyd-based compound. [I suspect it is not just re-packaged Glyptal from the Glyptal company, since it is rated for 121 deg. C vs. 135 for the Glyptal.] No dielectric strength is specified. The GC p/n for a 2 oz. bottle with brush is 10-9002 (or 10-9003 mounted on a display card). National Stock No.: (NSN 5970-00-901-5331).

GC was founded in 1930, and their 1st product was an all-purpose glue used by radio repairmen to fix cabinets and tears in speaker cones. In 1986, it was merged with Thorsen Tool Co. of Dallas, to become GC Thorsen. In 1989, GC Thorsen was purchased by Elgin National Industries, however to my knowledge, the name "GC Electronics" is still used.

73,
Sheldon KC0CW

Disclaimer: I have no association with General Electric, Glyptal Inc., or GC Electronics. I am providing this information for reference only.

footnotes:

(1) Glyptal Inc., 305 Eastern Ave., Chelsea, MA 02150 Tel. 617-884-6918 or 800-457-1201 fax: 617-884-8376

(2) GC Electronics, Rockford, IL (Retail sales are made exclusively via a network of over 1600 distributors. For nearest distributor, call 815-968-9661) swheaton@tyrell.net

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: wkleros@csn.net (Bill Kleronomos)
Subject: Great East Coast Blackout--FYI
Message-ID: <199507070332.AA10672@ns-1.csn.net>

As a former technical-type employee of a large western electric utility company (one that does the control and switching for a several state area) I learned some things about the blackout that are of some interest- certainly utility companies worldwide learned a big lesson from the incident.

The comments posted here of cart machines running slow prior to the blackout

pointed out both the cause and the ultimate solution to the vulnerability of electric utility companies connected in massive synchronous networks. Until the blackout, the protective relaying at substations and power plants consisted mostly of the usual over voltage, over current and ground fault stuff. There was little or no protection in place for an under-frequency condition, and if the synchronous motor of a broadcaster's cart machine was audibly slow, the underfrequency must have been several to perhaps ten Hz.

Say you're the operator of a 500 megawatt power plant and you want to put it on line to supply power to the grid. Do you close the breakers and turn up the voltage output? Nope- you turn up the frequency a fraction of a Hz higher than the network you're tied to. You in effect push against every motor and other generator connected to the grid. The blackout occurred because of the reverse condition. A relatively minor fault/overload dragged the entire network down- the power plant synchronizers poured on the coal until one by one the plants faulted off-line like dominoes due to the overload. Had there been under-frequency relaying in widespread use at the time, the breakers in key substations likely would have opened to isolate the fault and kept the remaining power plants alive. My employer's under-frequency relaying was set to trip in the tenths of a Hz below 60.

Let me mention that the protective relaying on a major transmission line is quite sophisticated. One interesting feature is that the systems look directionally down segments of a transmission line and are able to tell in what direction the fault lies. Sensing a fault, the equipment inquires in both directions to its identical correspondents miles away- "Did you see that fault too? Did you sense it before, or after I did?" (the stuff works VERY fast- often in fractions of a 60 Hz cycle, and breakers powered by high-pressure compressed air, hydraulics or other means open at almost comparable speeds). Again, had it been in place, the equipment could have isolated and opened any transmission line(s) that were dragging the rest of the system frequency down below tolerance even if there wasn't enough of an over-current or over mega-watt condition on any one line to fault it otherwise.

Problem #2 was putting all the pieces together afterwards. When the power plants faulted off-line, it was a rather spectacular event at many. There is a huge amount of energy inertia in the rotating turbines, generators and most of all, in the steam in the boilers at full tilt. You simply can't just open the breakers! There is an "Emergency - OFF!!" button on the control panel of a plant. When activated, the steam in the boilers is vented out of the top of the plant at it's full pressure and temperature through a bunch of culvert-sized pipes. The noise is unbelievable- a test of the system at one of our plants caused a farmer's dairy cows two miles away to go dry (While working on the top deck of a plant one day eyeing the vents I asked about "what if...." and was advised- "just don't be there...") At the same time, the coal mills, combustion blowers and anything else that makes fuel burn shut down. Later, it takes big, big watts (and time) to jump-start a power plant dead in the water (I think the overhead at one of

our plants was quoted at 10 MW!) No problemo getting that kind of power if you're tied to a bunch of 115 or 230 KV lines- except when they're dead. Today, most utilities have a contingency plan for a total blackout; my former employer built a medium sized hydro plant for the purpose and to supply peaking power in the summer. It is my understanding that there was one utility in New Jersey that wasn't tied to the network at the time of the black out and its power was instrumental in getting the Con Ed generators back on-line. Anyway, this was all fascinating stuff to me, and as I mentioned earlier, the great blackout is still not forgotten by a lot of folks, especially those in the electrical utility business....Bill

"Peak the grid, dip the plate, dive right in- don't hesitate!"

- de KD0HG/AAR8CC, ex WA9OZC

CE: KBCO AM 1190 KC & KBCO FM 97.3 Mhz

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: Andy Wallace <wallace@mc.com>
Subject: Ham radio novels/kids' books
Message-ID: <9507071638.AA10426@jupiter>

----- Begin Included Message -----

From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Radio Vitae

Bootlegger, using W9TGM; call lifted from the kid's
book "Danny Dunn and the Homework Machine" = 1959 - 1960

----- End Included Message -----

This reminds me. I read a book when I was about 12 called TODAY I AM A HAM. It was about a boy getting his ham license and then being a hero for notifying someone a bridge was out during a storm. I wonder if this is still in print.

--Andy

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: HAMRLUND@aol.com
Subject: HAMFEST JULY 9th / 8am-5pm
Message-ID: <950707124254_109884654@aol.com>

Hamfest this Sunday July 9th 8am to 5pm in Jackson, Mich. at the Jackson County Fairground. Over 40,000 sq. feet inside, and, 100,000 sq. feet of blacktopped trunk sales space. So if you can come and enjoy the day with us here in Jackson, YOUR ALL INVITED TO ATTEND!!

TAKE I-94 WEST FROM ANN ARBOR OR EAST FROM CHICAGO TO THE (APPRX.) THE 139 EXIT COOPER ST. AND GO SOUTH TO THE 2nd LIGHT AND TURN RIGHT CROSS THE TRACKS AND YOUR THERE (ON THE RIGHT)

SEE YOU THERE!

Robert

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Inventor W9CSX SK
Message-ID: <9507061643.AA05325@bock.ih.att.com>

Uh-h. Wire recording was invented in the 1890's by Valdemar Poulsen, a Danish engineer working for the Danish telephone company in Kobnhavn. He also invented the notion of recording in a spiral pattern on a metal disk.

Actually, he may have stuck to a metal tape or band, rather than a wire. He also had problems with the lack of amplifiers (no tubes till 1907 or so), so you needed a hefty carbon mike to record and headphones to play back.

The idea died out for a hile, and it may have been Camras who revived it with steel wire and tube amplifiers in both directions.

I have a SILvertone console radio/phono/wire recorder ca 1947, with several wires. Once I get it running, will be interesting to hear what kinds of home entertainment is on those spools. I still remember our family's first tape recorder, the funw e had iwth it in the '50s, with those acetate tapes that flaked away in later years.

Yes, Mylar tape was thinner so you could get longer play times, cost more, and had to be handled gently lest it streeeeetch. The cheap acetate stuff would just break, leading you to use some Scoth, and then some sticky cellophane tape :-)

--mike k

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Maybe this is funny (or sad, or ...)
Message-ID: <199507071818.LAA18102@hobbes.UCSC.EDU>

comp.dcom.telecom (moderated) #48649 (0 + 30 more) [1]
From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "Stanley L Flegler" <flegler@pilot.msu.edu>
Subject: Mil Help, Link 11/Tadil A?
Message-ID: <9507071653.AA36501@pilot01.cl.msu.edu>

I've been reading in Jane's Military Communications about various models of the R-1051 receiver being used in Link 11/Tadil A communications. Does anyone out there know what this refers to (as long as it isn't classified)?
Stan K8RPA, flegler@pilot.msu.edu

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: morgan@speckle.ncsl.nist.gov (Roy Morgan)
Subject: Re: Mil Help, Link 11/Tadil A?
Message-ID: <9507071736.AA20404@speckle.ncsl.nist.gov>

>I've been reading in Jane's Military Communications about various models of the
>R-1051 receiver being used in Link 11/Tadil A communications.

I THINK that Tadil means TActical Data Information Link.

This was a scheme to move information about a tactical battle situation around among the participants: information such as location, speed and course of both friendly and "target" units.

-- Roy --

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
(National Institute of Standards and Technology, formerly NBS)
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: Clark Fishman (FSAC) <cfishman@fsac3.pica.army.mil>
Subject: Mixers
Message-ID: <9507071314.aa20879@FSAC3.PICA.ARMY.MIL>

The SBL-1 and all it's cousins that are double balanced diode mixers will have about 6 db of insertion loss. In a HF receiver this will usually not hamper receiving except on very, very weak signals...The Drake TR-7 uses a double balanced mixer (DBM) with no pre-amp and works just fine...I think Drake had a switchable pre amp in the R-7 receiver.

The DBM when properly used can yield outstanding performance especially one that operates with +27 DBm local oscillator drive(yep that's 1/2 watt of LO) but those babies work. If you want good poop on DBM's ask your friendly Watkins Johnson rep for their rf components book, it's got good articles on DBM use and performance.

Other catalogs from Minicircuits and Merrimac Industries will fill you with more than enough poop on DMB's....

There are quad FET and DMOS quads used in receivers now (like the Watkins Johnson HF-1000) that have very good intermodulation specs and only require about 10 milliwatts of local oscillator drive and the mixer has 0 or sometime a positive insertion loss or in this case a gain...

If you put a preamp in front of the mixer....keep it's gain as low as possible to do the job and make sure it has an intercept point better than the mixer...

Keep the solder flowing

Clark Fishman WA2UNN cfishman@pica.army.mil

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: durham@w2xo.pgh.pa.us (James C. Durham)
Subject: Re: More time/freq stations
Message-ID: <199507070117.VAA05836@w2xo.pgh.pa.us>

Dick Dillman/WPE2VT wrote:

>In the 1970s, it is alleged, New York 50kW rocker WABC was used
>for... FSK teletype transmissions! This story came directly to me

(stuff deleted)

>I realize this is out there on the fringe. Yet the friend who told
>me WAS there at the station and is probably the last guy I can think
>of who would make up a story like this.

>Has anyone else heard this one?

I hadn't heard *that* one, but KDKA and KYW did it in the 60's!
This was when KYW was in Cleveland (Now there's a story..the KYW
move from Philly to Cleveland and back..but..another time)..

Anyhow, I was a young radio engineer dude in the 60's and I made a
point of visiting all the transmitter plants in the Cleveland area
when I was working at WGAR. I went to KYW and got a tour by their
xmtr op. At some point he pointed to a TTY sitting in the corner,
and explained that they were sending TTY to KDKA by exactly the
method you mentioned. So, I tend to believe your story about
WABC. I later confirmed this with the KD folks here in Pittsburgh.
I can't remember the purpose, however...

Dan Ingramme.... "Ladies and Gentlemen...at this moment more people
are listening to the Dan Ingramme show on WABC than any station
in the *world*". Wow, that was impressive!

-Jim D.

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: durham@w2xo.pgh.pa.us (James C. Durham)
Subject: Re: More time/freq stations
Message-ID: <199507070104.VAA05785@w2xo.pgh.pa.us>

TOM.A>ADAMS@mail.admin.wisc.edu wrote thusly...

(lotsa good stuff about WSM deleted..you read the original post ..right?)

Slick system, but no more than I'd expect from a station with WSM's history
of

engineering innovation; I understand that they were one of the first
commercial

FM broadcasters, operating before WW2 in the same time frame as Armstrong's

(more stuff deleted to save bandwidth)

I had a friend that became an engineer at WSM in the mid-60's. He related
to me (I wish I could remember the exact numbers) that WSM had had
carrier on the air *continuously* since sometime in the 20's or 30's. Not
one second of carrier break. *That's impressive*!!

Too bad the Clear Channel Association didn't win their case with the FCC.
Having some 750KW clears on AM would have been a toot... The Feds felt
it was a little unfair to give 750KW to a station that had competitors

limited to 5KW or less in the same market areas. WSM was a leading proponent of the CCA, and I think even may have started it...

It's a little awesome to think that the multi-million dollar Opryland all stemmed from a radio show on WSM. My friend got me backstage at the old Opry, when it was in the remodeled church, and it was something I'll never forget. That was real RADIO...

Speaking of HIGH POWER radio, does anyone know where to get a copy of "Moon River" about WLW, Cincinnati ? It describes the 500KW days.

Speaking of RADIO.. It might be fun to see how many RADIO dudes and dudesses are on the BA list and where they worked, what their ham calls were, etc, so here's mine...

HAM	COMMERCIAL
W8UHW 1954-1971	WCLW 1960
W2GHL 1971-1973	WGAR 1961-62
W8UHW 1973-1977	WEOL 1962
W2XO 1977-	WOUB 1962-63
	WMPO 1963-64
	WBRJ 1964-70
	WGR 1970-73
	WKRC 1973-1975
	WCNW 1976
	WBEN 1977-78
	WWSW 1978-80
	WKPA 1980-82
	WIXY 1982
	WQED 1982-?

How about you?

-Jim D.

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: More time/freq stations
Message-ID: <Pine.SUN.3.91.950706183732.4964A-100000@kahuna>

To all you professional broadcasters: Tune into the newsgroup rec.radio.broadcasting - that's where all the current pros hang out. It's a moderated group so no noise at all - very interesting reading.

Jeff NH6IL

P.S. Michael Moore: Thanks so much for the 20M xtal!!!! Hopefully I'll be on 14.060 Mc this weekend.

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: Emil Switzer <SWITZER+_E%A1%Electromagnetic_Sciences@mcimail.com>
Subject: Re Prathers Mill
Message-ID: <03950707182530/0006082972NA4EM@MCIMAIL.COM>

To: Boatanchors

Does anyone know if there will be a hamfest at Prathers Mill, GA this year and if so what are the details?

73 Emil

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: pbock@melpar.esys.com (Paul H. Bock)
Subject: R-390A *BRISTOW* wrench FS
Message-ID: <9507071206.AA09615@syseng1.se.melpar.esys.com>

I have an *ORIGINAL* R-390A/URR Bristow wrench of the type that clipped onto the back of the receiver. Nice long handle, angled end for good grip and lots of torque for tightening up those pesky knobs. Good condition.

As I only have one available, it will go to the highest bidder. I also used to have one of the "official" R-390A/URR Phillips screwdrivers which snapped into the other clip, but I haven't been able to find it yet. If I do (I'll mount a search this weekend) I'd prefer to sell the two as a set. More to follow next week.

E-mail only to pbock@melpar.esys.com

73,

Paul, K4MSG

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Tony Stalls (K4KY0)" <j38@clark.net>

Subject: R-390A Cabinet Feet

Message-ID: <Pine.SOL.3.91.950707101531.7507E-1000000@clark.net>

I didn't receive any responses to this question last week and getting the answer is holding up my taking the cabinet to the painter. If anybody knows about R-390A cabinet (CY-979A/URR) feet, I'd appreciate hearing from you.

What I need to know is whether or not the cabinet "skids" had large bolt-on rubber feet. In "keyboard art" it looks like this:

```
Cabinet CY-979A/URR  >--->  +-----+
                             |               |
                             | (front view)  |
                             |               |
                             +-----+
Shock mounts  >--->      XXX               XXX
Skids        >--->      [-----]         [-----]
Rubber Feet???? >--->      =  =             =  =

                             +-----+
                             |               |
                             | (side view)   |
                             |               |
                             +-----+
Shock mounts  >--->      XXX               XXX
Skids        >--->      =====
Rubber Feet???? >--->      =                 =
```

At first I was pretty sure that these rubber feet don't belong, but after looking at the holes more closely, they are drilled precisely the same on both skids and are symmetrical. If they don't belong, somebody went to a lot of trouble to do the job correctly.

Thanks & 73,
Tony
K4KY0

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995

From: Mark Blair <Mark.Blair@tus.ssi1.COM>

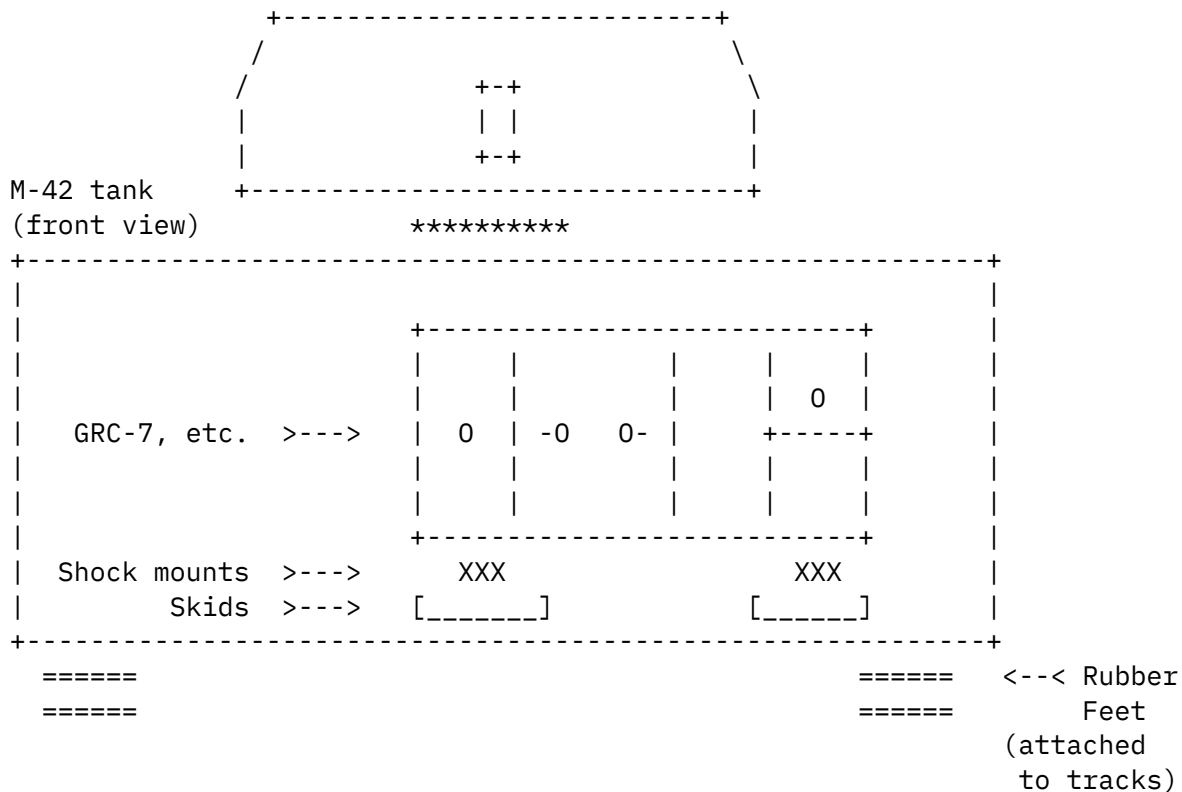
Subject: Re: R-390A Cabinet Feet

Message-ID: <199507071700.KAA10593@tu212.tus.ssi1.com>

j38@clark.net wrote:

```
> What I need to know is whether or not the cabinet "skids" had large
> bolt-on rubber feet. In "keyboard art" it looks like this:
```

I'm ashamed to say that I'm not (yet) familiar with the R-390A. However, your drawing looks an awful lot like the shockmounts for my GRC-xxx radios. With my radios, you would attach the rubber feet to the bottom of a tank, and then attach the tank to the bottom of the shockmount, like so:



But seriously, now, I would guess that the holes are just for mounting the shockmount in a vehicle or trailer, and I wouldn't expect the shockmount to be used in fixed installations.

And the GRC-7 goes in the back of the turret, but that was harder to draw. :-)

> Thanks & 73,

> Tony
> K4KY0

--

Mark J. Blair, KE6MYK	Silicon Systems, Inc.
Design Engineer	14351 Myford Rd. m/s C-90
mark.blair@tus.ssi1.com (714) 573-6709	Tustin, CA 92680-7022

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Rack rails for R390A?
Message-ID: <9507062127.AA06249@bock.ih.att.com>

You don't want to just put rackmount screws thru the holes in the front panel?
I think that front panel is rugged enuf to support the chassis without bending.
Of course you may need a buddy to support the beast while you get the first two
screws in. 73, mike k

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: rolfe@DUETTO.LDP.COM
Subject: Re: Rack rails for R390A?
Message-ID: <9507071256.AA0350@localhost>

Michael.J.Knudsen@att.com writes:

> You don't want to just put rackmount screws thru the holes in the
> front panel? I think that front panel is rugged enuf to support the
> chassis without bending. Of course you may need a buddy to support
> the beast while you get the first two screws in. 73, mike k

Well, I was hoping for a solution that would make ingress and egress a
little easier, but I may resort to the obvious solution you suggest
:-).

I'm still wary of supporting anything as heavy as a 390A with only the
front panel though.

Rolfe W3VH

--

Rolfe Tessem		Lucky Duck Productions
rolfe@ldp.com		96 Morton Street
(212) 463-0029		New York, NY 10014

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995

From: "Tony Stalls (K4KY0)" <j38@clark.net>
Subject: Re: Rack rails for R390A?
Message-ID: <Pine.SOL.3.91.950707090822.16383C-100000@clark.net>

On Fri, 7 Jul 1995 Michael.J.Knudsen@att.com wrote:

> You don't want to just put rackmount screws thru the holes in the front panel?
> I think that front panel is rugged enuf to support the chassis without bending.
> Of course you may need a buddy to support the beast while you get the first two
> screws in. 73, mike k

Lie the rack on its back and lower the R-390A into position and then put the screws in. That works.

73,
Tony
K4KY0

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "R. Dennis Gibbs" <dgibbs@Rational.COM>
Subject: Re: Rack rails for R390A?
Message-ID: <Chameleon.4.01.950707083531.dgibbs@meninx.ppp.verdix.com>

I've been mounting R390A's (And other Mil-Spec rack mount receivers) via only the front panel for several years now. I have not had any problems at all. I do follow the suggestion about putting the rack cabinet on its back, it makes mounting the receivers MUCH easier.

I still feel a bit uneasy about all that weight on a front panel, though, so I have some supports bolted into the rear of the rack to take some of the weight off of the front panel. Also, if you think you will be moving your rack frequently, supporting via the front panel only is probably NOT enough.

When I was a young lad and just getting started in this hobby, my brother had a 6 foot RCA rack on rollers, with ball-bearing side rails so that equipment could slide out of the rack for easy maintenance. I would love to have one of these again!

Dennis Gibbs

>
>

>On Fri, 7 Jul 1995 Michael.J.Knudsen@att.com wrote:

>

>> You don't want to just put rackmount screws thru the holes in the front panel?
>> I think that front panel is rugged enuf to support the chassis without bending.
>> Of course you may need a buddy to support the beast while you get the first two
>> screws in. 73, mike k

>

>Lie the rack on its back and lower the R-390A into position and then put
>the screws in. That works.

>

>73,
>Tony
>K4KY0

>

>

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: Rack rails for R390A?
Message-ID: <Pine.3.89.9507070833.A20962-0100000@indy1>

Hi!

Just a few quick thoughts on racking an R390; I don't own one but (far too many of) the gadgets I work on are extremely heavy, quite often rack-mounted and usually on roll-outs. (Vocabulary--here in God's country, "rails" are the vertical parts with the tapped holes in 'em that the panels screw to; "roll-outs" or "slide mounts" are the things that let you slide the gear in and out like a dresser drawer. Your mileage may vary!)

1. There aren't very many companies who *make* roll-out "rails," and if the R390 and kin were designed for this, you'll find 2 or more (3 or 4 is a good bet) holes of #8 or larger size in the sides, in a line a quarter or less of the way up from the bottom, possibly with threaded inserts on the inside. If this is the case, some measuring and careful shopping or catalog-hunting will likely result in a set of rails that fit perfectly.

2. Such roll-outs are designed to be supported at *both* ends. If your rack doesn't have a back set of (frame) rails, be prepared to improvise. Mounting the roll-outs at the front only is a sure way to take the receiver on a trip to the floor with nasty results.

3. If you can't find the exact roll-outs, or it was never meant for

them and you're reluctant to take a drill to the radio (I would be!), there are a couple of quick and dirty solutions:

A. The way for one person working alone to get something very heavy in a *solidly-mounted* rack is to put a pair of fairly long *steel* screws through the rails from the back, letting them stick out a good ways in front. This is for *tapped* rails only, don't try it with one of those oddball things that use clip nuts! Position them so they'll match up with the *highest* mounting holes in the panel. Then you can (ungh!) hoist the gear up onto the top screws, shove the bottom up against the rails and hold it there with one hand while putting screws in all the other holes and tightening them down. To finish it off, use an extension screwdriver to take out the "backwards" screws up top, and put a set in the right way 'round. Of course, if you think you'll have it in and out of the rack a lot, you might as well use shorter ones and leave them in backwards--if you really want to, you could put cap nuts over the exposed ends. The trade-off is, the longer the reversed screws are, the less risk there is the widget will slip off them and plummet screaming to the tile. And make sure the rack won't "walk away" while you're doing this, too! BTW, old RCA and a few other makes of rack use *12-24* screws rather than 10-32s, and are perfect for this trick--you can safely chin yourself on them, or just about.

B. Or cheat: Bud and a few other make rack-mounted drawers, including versions with lockable tops and/or "work surfaces." They'll hold a lot of weight on top if you're careful. This one costs rack space and requires some finagling if you want to put screws through the receiver's panel when it's in place in the rack, but it'll work.

There's my pronouncement for the morning--hope it's of some use. Caveat: size and weight are the main reasons I *don't* own an R390A; I don't think I could get one to the basement alone, and after we got the dryer down there, my husband announced that it was the *last* heavy thing he intended to ever take down those stairs! :)

73,
--Bobbi

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Tony Stalls (K4KY0)" <j38@clark.net>
Subject: Re: Rack rails for R390A?
Message-ID: <Pine.SOL.3.91.950707101145.7507D-100000@clark.net>

As I look at the rear of my R-390A, there are two holes near the bottom on both sides that look like they might be for a rear support. The receiver is close to the wall and on a shelf about four feet above the floor, so I didn't pull it out, so I can't say exactly what else is back there. Anyway, having bolts or rods to support from the rear may be your answer.

Good luck & 73,
Tony
K4KY0

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Nick England <nick@cs.unc.edu>
Subject: Re: Rack rails for R390A?
Message-ID: <199507071532.LAA07828@altair.cs.unc.edu>

Years ago I worked for the Naval Electronics Systems Test & Evaluation Facility. At one time we got in two racks full of R-390A's from some research project. The best I remember, they were mounted as follows:

The racks had two rear rails (vertical "angle iron" tapped the same as the front rails). On each side, a piece of aluminum angle was mounted between the front and rear rail to act as a shelf for the bottom edge of the R-390A. location of these side supports was such that the front holes would match up.

So if you do something like that it is at least "authentic" Navy style. This was a very common way of mounting heavy rack-mount gear. I think the blower equipment cabinets were similar, except they had air supply ducts in one side of the rack and air return in the other.

I can't recall seeing any R-390(A)'s mounted on roll-out slides. The best roll-outs are the ones which roll out and then tilt so you can access the bottom of the gear - make sure you have anti-tilt feet on your rack, though !!!

Nick KD4CPL
nick@cs.unc.edu

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: rolfe@DUETTO.LDP.COM
Subject: Re: Rack rails for R390A?
Message-ID: <9507071610.AA0384@localhost>

Nick England <nick@cs.unc.edu> writes:

> Years ago I worked for the Naval Electronics Systems Test &
> Evaluation Facility. At one time we got in two racks full of
> R-390A's from some research project. The best I remember, they were
> mounted as follows:

> The racks had two rear rails (vertical "angle iron" tapped the same
> as the front rails). On each side, a piece of aluminum angle was
> mounted between the front and rear rail to act as a shelf for the
> bottom edge of the R-390A. location of these side supports was such
> that the front holes would match up.

Of all the suggestions received, this sounds like the best bet to me. Most racks these days have the rear rails, so this should be a matter of making some custom aluminum angle to fit.

Thanks to all who responded!

Rolfe W3VH

--

Rolfe Tessem		Lucky Duck Productions
rolfe@ldp.com		96 Morton Street
(212) 463-0029		New York, NY 10014

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Radio Vitae
Message-ID: <F7705135.F7705146@mail.admin.wisc.edu>

to: boatanchors@theporch.com

Hello Jim.

FB on your radio / TV vital statistics. Here's mine.

They may be a bit vague and sorta inaccurate; it's a sign that I'm turning into an OF, and they say your memory is the second thing that goes ;-)

AMATEUR:

Bootlegger, using W9TGM; call lifted from the kid's book "Danny Dunn and the Homework Machine"	=	1959 - 1960
Novice, WN9LGD	=	1963
General, WA9QMB	=	1964
Advanced, WA9QMB	=	1964
Extra, WA9QMB	=	1966
Club station trustee, WA9YCK (Southeast Jr. College)	=	1967 - 1972
Extra, new call sign, K9TA	=	1974?

BROADCASTING:

WNC (Campus carrier current AM; 5 transmitters, 670KC)= 1973 - 1975
WATW (Ashland, WI; 1000/250 Watt AM ND) = 1974
Wisconsin Public Radio/ Radio Ops. Center = 1983 - 1985?
Wisc. Public Radio/ CE, WHHI-FM, Highland, WI = 1985? - 1988?
Wisc. Public Radio/ Alt. CE, WHAD-FM, Delafield WI = 1985? - 1988?
Wisc. Public TV/ Television Ops Center (plank owner) = 1988 - ?
WORT-FM Transmitter Maintenance Chief = 1990? - 1994

Sometime I gotta tell you about the time I was taking field strength measurements and the car got a flat on a logging road about 10 miles from the nearest highway, smack in the middle of a National Forest...

73's,

Tom, K9TA

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: Radio Vitae
Message-ID: <Pine.SUN.3.91.950706200355.5195A-100000@kahuna>

> Bootlegger, using W9TGM; call lifted from the kid's
> book "Danny Dunn and the Homework Machine" = 1959 - 1960

Geez Tom, you should have at least thrown an N in that prefix!

Jeff NH6IL (ex WA6QIJ, ex WN6___ [I'll never tell!])

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: lakeith@wrdis01.robins.af.mil (Larry Keith)
Subject: Re: Re Prathers Mill
Message-ID: <199507071900.0AA05639@wrdis01.robins.af.mil>

In your message of 7 Jul 1995 at 1344 EDT, you write:

> To: Boatanchors
>
> Does anyone know if there will be a hamfest at Prathers Mill, GA this
> year and if so what are the details?
>
> 73 Emil

The Prater's Mill Swapfest is usually in September, if I remember correctly. And, there is not a lot of publicity.. I usually hear about it from someone who heard about it on one of the trader's nets or the GA SSB net..

Last year, there were some flyers distributed at prior hamfests.
Maybe we will see something in Atlanta or Madison...

No Charge, No Talkin, No Fuss.. Just pick your tree and start
swapping!!

73,

Larry, KQ4BY

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Re. LF/VLF Reception
Message-ID: <F76J3905.F76J3919@mail.admin.wisc.edu>

to: boatanchors@theporch.com

Hello Mike.

I've been trying to resist answering messages on this thread because as most of the old timers on BOATANCHORS know we've plowed the LF/VLF field several times already in the last year or so. The problem is that I'm a LF/VLF nut (there are several of us here), and the chance to drag this into the cold light of day once more is too tempting :-)

Re. noise:

There's a few things you can do about it.

Most noise in the average amateur LF receiving installation comes in via the AC power line, as you've already discovered.

To combat that, I use a big (about 1200 VA) isolation transformer to power the receivers thru, and follow it with a big EMI/RFI "brick" filter scrapped from a hunk of computer gear. The transformer came from a piece of hospital electronics, where leakage current is a biggie. The transformer therefore has an electrostatic shield between the primary and secondary windings. The transformer core and filter can are tied to the station ground. The reduction in RF crud level it gives is most gratifying.

The main antenna for frequencies below 200 KHz or so is an active whip meant for use with pleasure boat LORAN receivers. These things have a very small current requirement at 10 or 12 VDC, and are powered thru the coax. I put together a small power inserter box which includes 12 volts worth of penlite cells to run the system, effectively isolating the antenna from the noise in the AC

line. Current drain is small enough that a set of cells lasts about a year.

The active antenna body came without a whip, but it has a threaded antenna hole that mates with the stud on a 102" CB whip. The whole business is mounted on a cheap steel fence post in my back yard, maybe 100' from the nearest building.

While the antenna was designed for 100 KHz, I have found this type of active antenna to be effective down to at least 5 KHz. This ONLY applies to the relatively cheap versions made for pleasure craft, NOT to the more professional or MIL-spec versions. Ironically, the performance from the more expensive and hard to get jobs is much inferior in this service, mainly due to the fact that the input circuit is much more selective than in the cheap units.

The main drawback with it is that it's essentially useless during the day due to overload and intermod from local daytime only AM broadcasters. This is a minor consideration tho since LF/VLF DXing is a nighttime activity.

The second antenna here, used mainly above 200 KHz, is my 160 metre Windom. It works quite well for "beacon band" DXing (200 - 425 KHz), and at night for monitoring the 500 KHz marine calling channel.

Re. BA receivers for LF/VLF: my biggies are (in order of preference) Collins R-389, Magnavox R-1134/WRR-3, National RBL-5.

To the rest of the folks who are tired of hearing about me + VLF, I extend my apologies for the bandwidth. Hopefully, I've got the info down to a relatively short version.

73's,

Tom, K9TA

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Removing adhesive residue????
Message-ID: <9507061604.AA05228@bock.ih.att.com>

I've used something called Goof-Off taht comes in a plastic bottle with a handy applicator cap. It's pretty raunchy, evaporates very fast (so you get to use a lot of it), and is such a powerful solvent that your fingertips are frosty white after using it, since it leaches out all your skin oils. It will dissolve Scotch tape and duct tape residues. Be sure to test it first on the proverbial inconspicuous location since it might take the paint off your BA too. --mike k

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: thaake@bsm2ee1.attmail.com (thaake)
Subject: RE: Ship Shape
Message-ID: <PMX-TERM-2.02-bsm2ee1-thaake-326>

Concerning the demise of typewriter companines especially those who can repair I kinda got the impression down through the years that you *can* be taught to repair these machines but it really takes some know how to make them sing.

This may just apply to RTTY machines but I suppose they overlap. Back in my early days of MIS my company at the time had banks and banks of 28 style machines for a "message switching" network. We used Western Union for the long haul overseas and ATT/local Bell for stateside. Most of the machines were serviced by the local Bell repairman. We had one on-site repair person which I got to know quite well. He was a master at repair and fine tuning. I never recall (it's been a LOOOONG time) him cracking a manual and there never seemed to be a machine that he couldn't work his magic on. Others came in from time to time for backup etc. but Jack was the magican. They purred when he was done.

I likened it to real brick/stone laying and or other types of professions that required "something more". I don't know, there seemed to be a difference between experience and talent. Am I making myself clear or what??

Tim WA0TSY
thaake@bsm2ee1.attmail.com

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: rdkeys@unity.ncsu.edu
Subject: Re: Ship Shape
Message-ID: <199507071621.MAA18369@cc01du.unity.ncsu.edu>

>
>
>

> Concerning the demise of typewriter companines especially those who can repair
> I kinda got the impression down through the years that you *can* be taught to
> repair these machines but it really takes some know how to make them sing.

Yeah, sad, because the ol radio mill is getting long in the tooth and noone around here knows how to service it anymore.

> This may just apply to RTTY machines but I suppose they overlap. Back in my

> early days of MIS my company at the time had banks and banks of 28 style
> machines for a "message switching" network. We used Western Union for the
> long haul overseas and ATT/local Bell for stateside. Most of the machines
> were serviced by the local Bell repairman. We had one on-site repair person
> which I got to know quite well. He was a master at repair and fine tuning. I
> never recall (it's been a LOOOONG time) him cracking a manual and there never
> seemed to be a machine that he couldn't work his magic on. Others came in
> from time to time for backup etc. but Jack was the magican. They purred when
> he was done.
>
> I likened it to real brick/stone laying and or other types of professions that
> required "something more". I don't know, there seemed to be a difference
> between experience and talent. Am I making myself clear or what??

Very clear!

That is what is called the art and craft of a profession or trade or job.
Most of it is merely brainpower (or the knack to remember a situation and
its immediate solution, explicitly, and draw therefrom later). That is
one reason why so many service technicians, well, sort of effervesce as
if they were just in the sewers of Paris. They just don't seem to be
able to get it together in the greymatters brainbucket department.

Training helps, but one has to have a knack for that sort of thing.
Experience helps, but one has to have a knack for that sort of thing.
That knack is the talent end of the game.

One can tell a good service technician by how he appraises the situation
when he first steps up to it. If you see the greymatters whirring, and
a certain intelligent look on his face, you know he has things well in
hand and probably the solution is shortly forthcoming, even as he first
steps up to the problem. That is both experience and talent working
together.

Regarding the ol' clankety/bang TTY machines (I have run several 19's,
14's, and 33's over the years) one has to LISTEN to the machines to
service and tune them properly. There is music and medical diagnostics
in those whirring gears and clanking type baskets. One can often tune
them up just by a careful ear. That is not in the books, but something
that one develops with experience and feeling, kindof like the shadtree
auto mechanic taking a 12 inch socket extender and listening as if with
a stethoscope to an automobile engine. That also, is not covered in
the manual or standard training courses. That type of thing is more
talent than experience, although experience feeds the knowledge to
the talent.

>
> Tim WA0TSY

> thaake@bsm2ee1.attmail.com
>

Gee, the philosophia de Boatanchoring!

73/Bob/NA4G

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: Ship Shape
Message-ID: <Pine.3.89.9507071149.A3358-0100000@indy2>

Hi!

In res ipso mills--or some other niftola[1] Latin phrase--King typewriter called me up the other day with the happy news my mill was ready!

So I went forthwith to get it, but alas, in the testing the "Figs" shift did not work, so I had to leave it, perhaps only 'til today.

You see, it's a 1920 or earlier three-row L. C. Smith Corona "flipover" portable, with three characters per slug and two shift keys, "Caps" and "Figs." While the 79-year-old tech who fixed it up is indeed first-rate and has plenty of experience with them, such machines only show up in a blue moon[2] and he simply forgot the other shift! All of the type slugs will want tweaked in on the other shift position, too, so it's not a quickly-fixed thing.

He was out but the owner and other tech, youngsters in their 60s, were nice enough to turn the machine over, find the problem, and show me how the double-shift works. Just a little corrosion between two sliding parts that control how far an arrangement of levers elevate the carriage--"just," but it makes a body understand why R390 slug racks are an art rather than a science, and why typewriter techs might not get rich but they'll never sleep hungry.

It's a wonderful place, King is--Underwood uprights next to letter-series IBM Electromatics (finest electric made), beside a Remington Noiseless and bolstered by a flock of Selectrics pondering early retirement, with the scent of light oil and working workbenches right out in the front room, scattered with the specialized tools of the trade. I was sorry to not have more time to spend!

So yes, the typewriter's fading, poor hardworking critters, but

they're not gone yet! But you'd better get your mills fixed now; I don't know where the next generation of typewriter repairmen are coming from, and it's a very arcane art indeed.

Better pick up a ream or two of canary newsprint second sheet, too; white bond is still out there--the rest is blowing away, carbon paper fluttering into the mist of history like last year's Autumn leaves and rubber stamps crouching forlorn like muddy puppies in the gutters, their black and red tracks already fading in the harsh digital light.

73,
--Bobbi

1. The "Niftola" is a wonderful and unfortunately fictional device, vaguely akin to the Victrola, but it only plays that which will be of the most interest to you. Closest thing? Perhaps the BA-list!

2. But there were two blue moons this month! Another L. C. Smith Corona had come in a few days ago, very like mine but black. Counting the owner's green one, on display in the window, it was quite a convention of them. :)

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Re: Ship Shape
Message-ID: <199507071728.KAA18005@hobbes.UCSC.EDU>

>One can tell a good service technician by how he appraises the situation
>when he first steps up to it. If you see the greymatters whirring, and
>a certain intelligent look on his face, you know he has things well in
>hand and probably the solution is shortly forthcoming, even as he first
>steps up to the problem. That is both experience and talent working
>together.

>

I used to evaluate computer service technicians (discrete transistor days) by how long it took the guy to bring in his oscilloscope and start looking at things. It seemed to me that the inferior ones spent a lot of time punching buttons, looking at the flickering lights, maybe trying to convince themselves that there was no problem, or worry the problem into going away. The better ones seemed to bring the oscilloscope in right away and start looking for what was wrong.

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: Steve Ellington <n41q@iglou.com>
Subject: Re: Ship Shape
Message-ID: <Pine.SOL.3.91.950707141850.11963A-100000@iglou.iglou.com>

On Fri, 7 Jul 1995, Roberta J. Barmore wrote:

>
> So yes, the typewriter's fading, poor hardworking critters, but
> they're not gone yet! But you'd better get your mills fixed now; I don't
> know where the next generation of typewriter repairmen are coming from,
> 73,
> --Bobbi
>

Yes indeed, typewriters are fading. I began working for this big bank in Louisville 18 years ago. Back in 1977, typewriters were king. I had 3 typewriter technicians working for me then and let me tell you, a good Selectric tech. is hard to come by. Those things aren't just gears and grease. There is a what I call "Mechanical Logic" involved in them. These guys were the forerunner of pc nerds, dweeps etc. In fact, they all wore pocket protectors and lab coats.

But the ultimate boat anchor of those days was the NCR 41 teller machine. 175 pounds of gears and levers packed so tightly that light couldn't be seen between them. We moved these around with a hydraulic cart, hoisted them up with a chain hoist and lowered them into a large tank. When we turned on the power, 8 shower heads sprayed the 41 with degreaser for a few hours as it rotated on its pivot due to the strong spray. Then the nerds would take the machine apart and carefully cover a 10ft x 4ft bench with hundreds of parts. Each part had to be inspected, greased and assembled. After 2 days came the final nerve racking moment when that first punch of a button caused the gears, registers, relays and counters to all jump into action. The worst sound possible was the ker without the chunk! Time to start over.

The greatest day was when we as a bank decided to replace these with NCR 279's. Electronic teller machines should be easier to fix and they certainly were. We talked about celebrating by throwing a 41 off the Ohio River bridge but never did. Some boatanchors are loved and some hated. That one was hated. Everyone is happier. Now while swapping out a card in a pc, we try not to think back on those dark days. But you know, those 41's sure helped our service van go better in the snow!

Steve
n4lq@iglou.com

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: dma@IslandNet.com (Jan Skirrow)
Subject: Re: Ship Shape & Bristol Fashion

Message-ID: <m0sU1qH-000L1eC@island.amtsgi.bc.ca>

>

>

>A while ago I believe there was a discussion in these pages about
>where to obtain the Bristol (spline) wrenches necessary for the
>R-390A. I didn't pay attention then, not being a '390 owner at the
>time, but one of these beauties now graces my radio room. Can
>someone please advise me what size wrenches I should add to my tool
>kit and where I might find them? Right now all I need to do is
>tighten up a front panel knob.
>Best Regards,

>

>Dick Dillman/WPE2VT
><ddillman@igc.apc.org>
>San Francisco

>

>

Surplus Sales of Nebraska (1502 Jones St., Omaha, 68102-3112; 1-800-244-4567) sells a set of Bristol wrenches for \$29.95. I have a set. The quality is good, but the price seems excessive. Also, the wrench that fits the large R-390A knobs is barely up to the job: a bit too short and hard to apply enough force to keep the sucker tight.

Jan Skirrow, VE7DJX
dma@IslandNet.com

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: paul Veltman <veltman@netcom.com>
Subject: Re: Ship Shape & Bristol Fashion
Message-ID: <Pine.3.89.9507062116.A24876-01000000@netcom19>

Dick,

I bought a set of Xcelite Spline Wrenches (the same as Bristow or close enough, your set screws will never know the difference) at my local tron emporium. They're around \$35 for the set, but I think well worth it. GC makes a set for about \$5 that look like little Allen Wrenches. I'd buy the Xcelite.

73

Paul WA6OKQ

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: Michael.J.Knudsen@att.com

Subject: Re: Ship Shape & Bristol Fashion
Message-ID: <9507061746.AA05441@bock.ih.att.com>

Wow, thanks for yet another weird tool supplier -- and this one within easy lunch-hour driving distance from work!

Gas pliers have been a Bell Labs stockroom staple for years. Yes, they will grip anything -- but at a PRICE. Their sharply grooved, case-hardened jaws sink into the metal to get a good grip, but leave scars. On brass rod, these pliers make a poor man's lathe -- you can shave off as much metal as you want!

So use them as a last resort, on non-visible parts, or parts you plan to replace after you get the \$%^&* thing apart and repaired.

This AM's paper had a story about disappearing typewriters. It seems the one or two places that still do repairs have more business than they can handle, but the hand(?) writing's on the wall.... mike k

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: "Tony Stalls (K4KY0)" <j38@clark.net>
Subject: Re: Ship Shape & Bristol Fashion
Message-ID: <Pine.SOL.3.91.950707090332.16383B-100000@clark.net>

On Fri, 7 Jul 1995 Michael.J.Knudsen@att.com wrote:

> This AM's paper had a story about disappearing typewriters.
> It seems the one or two places that still do repairs have more business
> than they can handle, but the hand(?) writing's on the wall.... mike k

I heard a news story this week on CNN's business news that Smith-Corona has declared bankruptcy. I suppose we can add mills to the BA category.

73,
Tony
K4KY0

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: KANAMAA%AMGATE%MATRXA@randb.pprd.abbott.com
Subject: Thanks/book/oakcreek
Message-ID: <01HSL0JSG2GI8ZFNRC@RANDB.PPRD.Abbott.Com>

From: Kana, Michael X.

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
Subject: Thanks/book/oakcreek

Thanks for all the suggestions regarding the Ultimate CW Transmitter. I would compile the responses but if yall are like me, you save every message. I did find the hybrid/homebrew article in one of the early 70's handbooks - the rig was the T9'er which was a CW specific transmitter with all the little bells that CW folk like. Im going to the Oak Creek WI fest this weekend with the hopes of finding a 50's era handbook. I vaguely remember a KW class rig with modules for each band (813 in the final I think....)

In the book department, I picked up a book this weekend while bumming around Austin. Its called RADIOTEXT(E) published by Semiotext(e). I never heard of this outfit before but the book contains a selection of radio/broadcast stories that span the ages. Lots of interesting stuff. I thought at first this book was rec.broadcasting material but the stories cover some vintage so I guess its boatanchor material. One interesting story was a VLF whistler story dealing with Whistlers and the Marfa (TX) Lights. I drove through Marfa during one of my epic Houston to San Diego college road trips. I didnt see any of the lights but I figure that would be a good place for VLF monitoring since there isnt anything out there except for jackrabbits!

73 de AA9IL

Mike Kana

NEW INTERNET ADDRESS: Please post any direct replies to
cosmo224@aol.com

My work internet address will no longer be valid as of 7-8-95
ciao!

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: dma@IslandNet.com (Jan Skirrow)
Subject: Re: Time signal stations
Message-ID: <m0sU1qJ-000L2GC@island.amtsgi.bc.ca>

Bill Standerfer (bills@lvld.hp.com) wrote:

>A couple of years (and a draft notice) later, I was in the Air Force in
>precision measurements. We used a receiver/comparator to check the oscillators
>in the precision counters of the day (HP 5245Ls with the precision oscillator
>option). In Maine I believe we used one of the right coast Navy signals
>around 17.5khz as the frequency standard. I don't remember if the receiver
>was HP or Fluke, but the model number 107 sticks in my mind. The receiver
>went from around 10khz to about 100khz and had a strip chart output from the

>comparator. Might be an interesting BA to pick up sometime for ELF listening,
>but would probably require some work to get something you could listen to out
>of it.

In the late 1960s I worked in a physics research lab that had a Fluke rcvr
to monitor
the Fort Collins 100khz signal. We used it to check lab frequency standards
used in
microwave experiments. It was a great rcvr, but no "toobs", and ran on a
12volt car
battery when the line power went out. It did have an audio output as well as
the paper
chart. I visited the lab a couple of years ago, and the rcvr was still
clunking out
paper chart after over 20 years of continuous, 24 hours a day operation.

By the by, the received 100 khz signal will shift in phase if something like
an ionized cloud
crosses the signal path. We observed a large shift following a Chinese
atmospheric atomic
bomb blast. Calculating the speed with which that cloud would have moved to
intercept
our transmission path from Fort Collins, we felt we had pretty good grounds for
declaring the phase shift as a way of detecting atmospheric tests. The
results were
published in Nature - a quick publication scientific journal.

There were those who disagreed with our conclusions, of course. While
atmospheric blasts
are certainly detectable this way, more sophisticated and sure methods have
since been
developed. But even a lowly frequency standard comparator can have a few
exciting moments!

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Time Signal Stations
Message-ID: <9507061647.AA05331@bock.ih.att.com>

Ya know, I have noticed an extra carrier (or sideband?) along wiht
WWV on 10 MC. I can get rid of it on my SW-77 by putting the
synchronous detector on LSB only, so it is USB. Hadn't heard
any modulation on this QRM, but maybe I'll check it out further.

Hmmm, the LSB side of my CV-157 is working, so I really SHOULD
use that and the R390A, not that Sony ricebox :-)) --mike k

From boatanchors@theporch.com Fri Jul 7 15:00:00 1995
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: To conceal or not
Message-ID: <52959.owen@apollo.eeel.nist.gov>

The suggestion to have an E-mail address list is a good one.
The suggestion by Steve Byan is great. (request a list of all subscribers)
However when I requested it I found that all but 3 of the 531 on the list
were concealed including myself. So I suggest that we all un-conceal
ourselves. But do this only if you don't mind your E-mail addresses being
available to the list. To do this send an E-mail to listproc@theporch.com
and in the body SET BOATANCHORS CONCEAL NO thats all thats required.
I've changed mine how about you.

James C. Owen, III
National Institute of Standards & Technology (NIST)
Bldg 225/B360
Gaithersburg, MD 20899
1-301-975-5623

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Peter.Ferrand@leotech.MV.COM (Peter Ferrand)
Subject: Tuned Speaker Constructio
Message-ID: <805100101.F00005@leotech>

UU>On Wed, 5 Jul 1995, Bobbi wrote:

>> (I do plan to try an "organ-pipe" resonant speaker, though being
an
>>obnoxious purist I'm pondering either a square column or hunting up
a
>>fiber/Bakelite tube of the proper size--PVC isn't really 1939/40
>>stuff!)

One word: Catalin

Other words: I wonder if that Meissner tuned audio device was
designed to be fed from the volume control of the radio, hence
the highish impedance. Also, my recollection is that back in the
olde days people listened to CW at a higher audio frequency. People
were smaller in those days...

Hey, guys, how about coupling a transducer to a flute or a

clarinet? I'm kinda partial to building a regenerative CW
repeater out of a harpsichord.

73,
-Pete
WB2QLL

* Origin: NETIS Public Access Internet (603)432-2517 (1:132/189)

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Michael.J.Knudsen@att.com
Subject: RE: Tuned Speaker Construction
Message-ID: <9507061550.AA05189@bock.ih.att.com>

I too have a lot of leftover earphones. The ultimate trick with these
(and yes, gluing one to a cardboard tube, like the paper you use to
write your CONgresslifeform each day, is a quick way to get a resonant
speaker pipe), is to take a big Conch shell (I snorkeled a real
grandmuthah one in Cancun that's cluttering up my mantelpiece),
bust a hole in just the right spot, and glue on the earphone driver.

These were real popular in England during the 1920's. If I can find
a South Pacific Islander to take to lunch and ask where to make the hole...

Be sure to play some New Age relaxation tapes of surf breaking thru the thing
when not using it on the air -- Wow, I can hear the waves!

Seriously, the above comes from "A Flick of the Switch", a nice little paperback
on early radios. Includes a whole chapter of comm gear, and another on
Ham radio operations. The comm gear goes up to early '50s, stopping
short of Halli SX-99, 62, or National NC300. 73, mike k

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Tuned Speaker Construction
Message-ID: <9507061600.AA05218@bock.ih.att.com>

Be sure to show up early at the Field Day site so's you can scrounge
plenty of dry kindling to run yer steamboatanchor station.
Sterno and propane just don't cut it for authenticity.
A bag of coal would be OK, tho. --mike k

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Kevin J Pease <kevin@mm1001.theporch.com>

Subject: Re: who's more sensitive

Message-ID: <Pine.LNX.3.91.950706223027.1232B-1000000@mm1001.theporch.com>

Kevin J Pease

WB0JZG Mt Juliet, TN.

mm1001.theporch.com

Interesting discussion Mike. However I beg to differ with the following statement.

> usual solly-state mixer whose dynamic range can't touch a 6BE6's.

The 6BE6 is one of the worst TUBE mixers generates a lot of noise and not so good dynamic range. AN SBL-1 diode mixer will out perform the 6BE6 in all respects. Most of the quality RICEBOX receivers are verry good in the frontend overload/intermod area. I must agree that some of the less expensive are not too good. Surprisingly MY littl RatShack DX-440 is pretty good in the overload/Intermod area and pretty sensitive also.

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995

From: Steven Wilson <randyw@crl.com>

Subject: Re: who's more sensitive

Message-ID: <Pine.SUN.3.91.950707053543.2472A-1000000@crl7.crl.com>

Hi Kevin, I have used the SBL and it is a good mixer, but found it to have conversion loss. In some applications one can not give up 6 or more db so still need either tube or transistor mixer.

On Thu, 6 Jul 1995, Kevin J Pease wrote:

>

>

> Kevin J Pease

> WB0JZG Mt Juliet, TN.

> mm1001.theporch.com

> Interesting discussion Mike. However I beg to differ with the following
> statement.

>

> > usual solly-state mixer whose dynamic range can't touch a 6BE6's.

>

> The 6BE6 is one of the worst TUBE mixers generates a lot of noise and not
> so good dynamic range. AN SBL-1 diode mixer will out perform the 6BE6 in
> all respects. Most of the quality RICEBOX receivers are verry good in the
> frontend overload/intermod area. I must agree that some of the less
> expensive are not too good. Surprisingly MY littl RatShack DX-440 is
> pretty good in the overload/Intermod area and pretty sensitive also.

>

From boatanchors@theporch.com Fri Jul 7 11:47:00 1995
From: HAMRLUND@aol.com
Subject: WNT: HAMMARLUND 4-20 COILS
Message-ID: <950707110100_27165702@aol.com>

iIn need of the following Hammarlund 4-20 xmitter P.A. Tank Coils:

part #	Band
--------	------

29829-1	80m
29829-2	40m
29829-3	20m
29829-4	10m

Please contact me if you have or know of any of the above coils.

Robert

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: HAMRLUND@aol.com
Subject: WNT: SP-600 MANUALS, MILITARY
Message-ID: <950706223215_26874359@aol.com>

Wanted SP-600 receiver Military and factory manuals & suppliments for any and all in this series.

Robert Fowle
1215 Winifred
Jackson, Mich. 49202-1946

517-789-6721

or E-mail

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: bill@texan.frco.com (William Hawkins)
Subject: Re: Wood pipe
Message-ID: <9507070446.AA09886@texan.frco.com>

Actually, all the wood organ pipes I've seen (and that's not very many) are square - made out of four planks. Nothing magic in it being round.

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Steven Wilson <randyw@crl.com>
Subject: Re: WWVB decoding
Message-ID: <Pine.SUN.3.91.950706190039.5041A-100000@crl2.crl.com>

It will cost you a phone call. Call WWVB in boulder CO and they will send you a booklet free that shows the coding format. If you want to build a nice WWVB receiver see 73 mag jan and feb 1994. I have finish building my version of it and it is a great project. I am now working on a uP pgm to decode for a LCD time display. de stan ak0b

From boatanchors@theporch.com Fri Jul 7 03:01:00 1995
From: Terry Lee Ehrlich <terrylee@pr1.k12.co.us>
Subject: Re: WWVB decoding
Message-ID: <Pine.OSF.3.91.950706202853.443A-100000@alpha.pr1.k12.co.us>

> It will cost you a phone call. Call WWVB in boulder CO.....

Kind of interesting, isn't it? WWVB has Boulder as the location by address...(B. of S.)...when the broadcast says it's in "Ft. Collins, Colorado" and in fact it's located eight miles north of that city in the backyard of a town by the name of "Wellington"...Show me THAT fly-speck on a world map!

We occasionally get 100+ mph winds here...but that bunch of towers has been standing there since the Fall of 1966...swayin' in the Colorado breezes....

Terry Lee

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=====
Richard T. Ammon      |    $$ BUYING OLD RADIO ANYTHING...$$
                      |    sets, parts, literature, magazines, etc
Terry Lee Ehrlich    (StepSon) |    Particularly interested in transistor
                      |    radios with "CD" markings at 640 & 1240
Join COLORADO RADIO COLLECTORS |    on the dial...smaller the better. Thanks!
=====
```